

Bayblend® FR3005 HF BBS314

FR grades / Non reinforced

(PC+ABS)-Blend; flame retardant; very easy-flowing; Vicat/B 120 temperature = 96 °C; UL recognition 94 V-0 at 1.5 mm; Components for the electrical/electronics sector

ISO Shortname

PC+ABS-FR(40)

Property	Test Condition	Unit	Standard	typical Value
Rheological properties				
C Melt volume-flow rate	240 °C/ 5 kg	cm³/10 min	ISO 1133	38
Melt viscosity	1000 s ⁻¹ / 240 °C	Pa·s	b.o. ISO 11443-A	120
Molding shrinkage, parallel	150x105x3 mm/ 240 °C / MT 80 °C	%	b.o. ISO 2577	0.5-0.7
Molding shrinkage, normal	150x105x3 mm/ 240 °C / MT 80 °C	%	b.o. ISO 2577	0.5-0.7
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2700
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	60
C Yield strain	50 mm/min	%	ISO 527-1,-2	3.6
Stress at break	50 mm/min	MPa	ISO 527-1,-2	45
Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	> 40
Flexural modulus	2 mm/min	MPa	ISO 178	2800
Flexural strain at flexural strength	2 mm/min	%	ISO 178	5
Flexural strength	2 mm/min	MPa	ISO 178	94
Izod impact strength	23 °C	kJ/m²	ISO 180-U	N
Izod notched impact strength	23 °C	kJ/m²	ISO 180-A	12
Thermal properties				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	79
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	90
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	96
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.71
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.72
C Burning behavior UL 94 (1.5 mm) [UL recognition]	1.5 mm	Class	UL 94	V-0
C Burning behavior UL 94-5V [UL recognition]	1.8 mm	Class	UL 94	5VB
Electrical properties (23 °C/50 % r. h.)				
C Volume resistivity		Ohm·m	IEC 60093	1E15
C Surface resistivity		Ohm	IEC 60093	1E16
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	250
Other properties (23 °C)				
C Density		kg/m³	ISO 1183-1	1190
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	240
C Injection molding-Mold temperature		°C	ISO 294	80
C Injection molding-Injection velocity		mm/s	ISO 294	240

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

Impact properties: N = non-break, P = partial break, C = complete break

